

ORIGINAL ARTICLE

# Association of Sleep Quality with Socio-Demographic Characteristics in Elderly Referred to Health Centers in Qazvin, Iran

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## ABSTRACT

**Background and aim:** Sleep disorders are not innately harmful to quality of life, they can induce or complicate physical and mental sicknesses and increase the risk of mortality. The aim of this study was to determine the association of sleep quality components with socio-demographic characteristics in elderly people in Qazvin, Iran.

**Materials and Methods:** This descriptive cross-sectional study was performed on 400 elderly patients referred to health centers in Qazvin. Data were collected by using a demographic questionnaire and the Pittsburgh sleep quality index (PSQI). Data were analyzed by SPSS 19 software, descriptive and inferential statistics (Mann-Whitney, Chi-square, logistic regression).

**Results:** The prevalence of poor sleep quality was 80%. Statistically significant difference were observed between total global PSQI score and economic condition ( $p < 0.03$ ) and had chronic physical disease ( $P < 0.001$ ). Highest component scores was sleep latency ( $1.55 \pm 1.06$ ) and lowest was habitual sleep efficiency ( $0.16 \pm 0.57$ ). Older women had worse sleep quality compared with older men ( $P < 0.05$ ). Multivariate logistic regression model indicated that female sex is associated with greater tendency towards poor sleep quality (OR=1.78, 95% CI=1.08-2.94,  $P=0.022$ ).

**Conclusion:** This study provides evidences that poor sleep quality was high among the elderly of Qazvin. It seems sleep quality assessment of older adults is necessary to identify the factors affecting sleep quality and to adopt appropriate measures and strategies to eliminate or reduce the effect of these factors.

**Keywords:** elderly, sleep quality, community health centers

## INTRODUCTION

Sleep is a basic need of human being because it assists the body to relax and repair, maintain appropriate circadian rhythm and preserve energy for daily living (Azri et al., 2016). Insufficient sleep can increase fatigue and

unrestrained daytime sleepiness. Sleep complications have an adverse effect on mental and physical health, impair the quality of life and increase the healthcare expenses. Quality of sleep will finally influence energy, emotional balance and health. Therefore, poor sleep quality and sleep disorders such as insomnia can undermine the quality of life (Azri et al., 2016). As a result of aging, changes such as decreased efficiency and total sleep time and increased superficial sleep take place, thereby influencing the quantity and quality of sleep (Mendoza-Meléndez et al., 2016).

Sleep disorders in old age are prevalent and have been known (Wu, Tung-Ping Su, Chin-Lung Fang, & Mei Yeh Chang, 2012). Approximately 50% of the adults aged

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